NPDES PERMIT NO. NM0030155
STATEMENT OF BASIS

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

I. APPLICANT

State of New Mexico Department of Game & Fish (DGF)
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II. ISSUING OFFICE

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III. PREPARED BY

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IV. DATE PREPARED

June 12, 2006

V. PERMIT ACTION

Renewal of a permit issued May 25, 2001.

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, revised as of May 16, 2006.

VI. PROPOSED CHANGES FROM PREVIOUS PERMIT

It is proposed that the current permit be reissued for a 5-year term.

The changes from the current permit issued May 25, 2001, with an effective date of July 1, 2001, and an expiration date of September 30, 2006, are:

A. Ammonia report requirements have been eliminated from Outfall 001
B. Temperature report requirements have been eliminated from Outfall 001
C. The pollutant pH has been made more stringent
D. Whole effluent toxicity testing requirements for the use of non-approved FDA drugs, medications and/or chemicals have been changed from 48-hour acute to 7-day chronic
E. Whole effluent toxicity limits have been established in the permit at a 77% critical dilution for Outfall 001
F. A new Outfall 002 has been established
G. A new monitoring Outfall COMB has been established

VII. DISCHARGE LOCATION

As described in the application, the facility is located off River Road, approximately 5-miles southeast of Santa Rosa in Guadalupe County, NM. The discharge from the facility is to receiving waters named the Ortega-Borsich drainage ditch, thence to the Pecos River from:

Outfall 001 - Latitude 34° 54' 45" North, Longitude 104° 40' 05" West
Outfall 002 - Latitude 34° 54' 44" North, Longitude 104° 40' 04" West (New Outfall)

VIII. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code 0921, the applicant operates a finfish hatchery raising rainbow trout and a new expansion that will allow it to produce up to 11 species of warmwater fish such as largemouth and small mouth bass, striped bass, channel catfish and walleye for stocking in lakes and/or streams. The existing operation described in the application consists of water continuously flowing from Rock Lake, aerated in a single concrete splash basin, then entering into one of the existing 16 concrete fish production raceways. Flow from the raceways enters a single concrete kettle then goes into a single, 0.5 million-gallon, earthen settling pond. The water discharges from the earthen pond via an 18-inch pipe, through Outfall 001, and then enters the Ortega-Borsich ditch. The previous permit's statement of basis stated that 10 to 20% of the flow that enters the Ortega Borsich drainage ditch reaches the Pecos River, and 80 to 90% is used for irrigation. There is no quantification of this however, and for permit purposes, it will be assumed that the entire discharge reaches the Pecos River. The highest monthly flow through the raceways during the past 24-months was 6.8 MGD. The estimated maximum harvestable weight of trout is 145,000 lbs.

The facility will soon start construction of a warmwater fish production system, built in two-stages. Phase-one, estimated to start mid-2006, will add fourteen, 1.3 million-gallon warmwater

ponds and one, 1.1 million gallon settling pond. A second permitted discharge, Outfall 002, will be added at the discharge side of the new warmwater-settling pond. Phase-two will add four additional 1.2 million gallon ponds, and four smaller bass ponds. Based on the application the warmwater fish maximum harvestable weight is estimated at 52,000 lbs per year.

The operations of warmwater fish production are significantly different than coldwater species. The warmwater fishes are "batch" produced. The ponds are filled with water, warmwater fingerlings are introduced, fed and when the fish are at harvestable size, the ponds are drained and the fish collected for the DGF stocking programs. Unlike the coldwater fish operation, water is not continuously flowing through the pond. The purpose of the new settling pond is to collect and allow settling of the wastes when the warmwater fishponds are drained. Warmwater fish harvesting is expected to take place between May and November.

During normal operations for both coldwater and warmwater fish operations, at approximately five-year intervals, both settling ponds will need to be drained and solids removed. It is estimated that this cleaning will remove a settling pond from operations for two-months. During this intermittent cleanout, the remaining settling pond will be used to treat the wastewater from both warmwater and coldwater systems.

IX. RECEIVING STREAM STANDARDS

The effluent from the facility is discharged to receiving waters named the Ortega-Borsich drainage ditch, thence to the Pecos River in segment number 20.6.4.211 of the Pecos River Basin.

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, effective February 16, 2006). The designated uses of the receiving waters are fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat, and secondary contact.

X. EFFLUENT CHARACTERISTICS

The facility submitted information in its application that describes the nature of the permitted discharge. Sampling was conducted for the human health parameters and data was also obtained from the facilities DMR's. Data that exceeded MQL's and other salient data are included below:

Pollutant	Avg Concentration, mg/l, unless noted
Total Suspended Solids (TSS)	3.2
Ammonia	0.3
Temperature	65º F
Settleable Solids (SS)	ND
Arsenic	2 ug/l
Barium	14 ug/l
Boron	150 ug/l

XI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

The proposed effluent limitations for those pollutants proposed to be limited are based on regulations promulgated at [40 CFR 122.44]. The draft permit limits are based on either technology-based effluent limits pursuant to [40 CFR 122.44(a)], on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to [40 CFR 122.44(d)], whichever are more stringent.

A. REASON FOR PERMIT ISSUANCE

It is proposed that the permit be issued for a 5-year term following regulations promulgated at [40 CFR 122.46(a)].

The initial permit application was received on March 13, 2006, and additional information received May 19, 2006.

B. OPERATION AND REPORTING

The permittee must submit discharge monitoring reports (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit, to report on all limitations and monitoring requirements in the permit.

The permit will have two outfalls, with sampling and reporting requirements required for each outfall.

C. TECHNOLOGY BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at [40 CFR 122.44(a)] require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

Technology-based effluent limitations found at [40 CFR 451] have been promulgated for this type of activity. Regulations for best practicable control technology currently available (BPT), apply for discharge of pollutants from a concentrated aquatic animal production facility that produces 100,000 pounds or more per year of aquatic animals in a flow-through system. The facility produces approximately 197,000 pounds annually. The regulations in [40 CFR 451] require best management practices (BMP) relating to solids control, materials storage, structural maintenance, recordkeeping and training. No chemical specific, effluent limitation guidelines are established. The draft permit shows the specific BMP's contained in the regulations. These technology-based BMP's will replace the previous permit's BMP plan.

The previous permit established technology-based limitations for total suspended solids (TSS) and settleable solids (SS). Limitations for TSS were established at 10 mg/l daily avg., 15 mg/l daily max. Limitations for SS were established at 0.1 milliliter/liter (ml/l) daily avg., 0.5 ml/l daily max. These limitations will be retained in the draft permit for Outfall 001, and established for Outfall 002.

Mass loading limits shall be established for TSS in the draft permit for Outfall 001. Effluent flow of 6.8 MGD, conversion factor of 8.345 lbs/gallon, and daily maximum concentrations of 15 mg/l, monthly average concentration of 10 mg/l, yields mass loadings of:

Daily maximum: 6.8 X 8.345 X 15 = 851 lbs
Monthly average: 6.8 X 8.345 X 10 = 567 lbs

Mass loading limits are not established in the draft permit for Outfall 002, since the flow is projected to be variable and intermittent. The technology-based limitations are based on concentration limits and these will be protective. This is in accordance with [40 CFR 122.45(f)(1)(iii)], where mass limits are infeasible because the discharge cannot be related to a measure of operation. Mass loading shall be a "Report" in the draft permit.

Monitoring frequency for TSS and SS, for Outfall 001, will be identical to the current permit, twice/month. Sample type in the current permit for TSS is a 24-hour composite, but the flow is only required at once per day frequency. Based on the BPJ of the permit writer, for the continuous discharge, the sample type for TSS in the draft permit, for Outfall 001, will be grab. Additionally, language will be added that the first sample event for any reporting period shall be at least 10 days from the previous reporting period's first sample event. The permit will propose that sampling occur when the facility is cleaning the raceways.

For the new Outfall 002, flow will be monitored and reported daily, when discharging. Since the discharges from Outfall 002 are based on flow from separate production ponds, and short term, TSS and SS shall be monitored once per week when discharging. Sample types for TSS and SS will be grab samples.

D. SOLID WASTE PRACTICES

The previous permit included provisions for solid waste disposal that referenced regulations contained in [40 CFR 257]. That citation was not appropriate for an NPDES permit however, as those regulations are beyond those of the Clean Water Act. The draft permit will remove the requirements for solid waste disposal.

E. WATER QUALITY BASED LIMITATIONS

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan.

2. Revised Water Quality Standards

The precertification document issued by the New Mexico Environment Department pursuant to Section 401 of the federal Clean Water Act is based upon the revised water quality standards currently effective under State law. In a letter from Marcy Leavitt (NMED) to Willie Lane

(EPA) dated May 25, 2006, the State of New Mexico precertified that the discharge will comply with applicable provisions of Sections 208(e), 301, 302, 303, 306 and 307 of the Clean Water Act and with appropriate requirements of State law upon inclusion of the conditions stated below in the permit.

The NM WQCC adopted new WQS for the State of New Mexico. The revised WQS as amended through February 16, 2006, are available on the NMED's website at: http://www.nmenv.state.nm.us/swqb/Standards/20.6.4NMAC.pdf. The WQCC established the revised WQS in accordance with, and under authority of, the NM Water Quality Act [Chapter 74, Article 6, NMSA 1978 Annotated]. The WQS have not been approved by EPA in accordance with Section 303 of the CWA.

In accordance with State law, the Water Quality Standards (WQS) were properly filed with the State Records Center and publicly noticed in the NM Register May 13, 2005. The revised WQS became effective under State law on May 23, 2005, and Standards were amended through July 17, 2005. The NMED has a non-discretionary duty to base state certification of federal water quality permits on applicable requirements of State law.

The agency is constrained by the "Alaska Rule" [Alaska Clean Water Alliance v. Clark, No. C96-1762R (W.D. Wash.)] in implementing the new NM WQS, until such time as the revised NM WQS are fully approved by EPA pursuant to Section 303 of the Clean Water Act. However, according to EPA memorandum from Geoffrey H. Grubbs, Director Office of Science and Technology dated September 15, 2000, if a State or tribe bases a section 401 certification on the more stringent state requirement, as allowed under CWA section 401(d), EPA would put the effluent limitations specified in the certification into an EPA-issued permit.

The Region, where appropriate, will draft permits with the new standards in place. If the new standards make more restrictive a limit, a compliance schedule will be placed in the permit. If a new parameter were added to the standards that would be added to the permit, then it would also get a compliance schedule. If the standard were less stringent than the currently approved standard, the Region would put the effluent limitation specified in the current Standards, until EPA approves the revised Standards. In addition, if the Region were required under a 401 certification to replace an effluent limitation of a pollutant for another effluent limitation of similar nature, the agency would include effluent limitations of both pollutants until the agency approves the revised Standards. However, the agency will grant a compliance schedule to allow the permittee sufficient time to achieve effluent limitation for the new parameter.

3. Segment Specific Water Quality-Based Limits

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at [40 CFR 122.44 (d)] state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. The pollutant concentrations contained in the permit application were measured against State numeric water quality standards, and these are shown in the attached spreadsheet.

The spreadsheet shows that no pollutants measured demonstrate a reasonable potential to exceed State WQS.

Regulations promulgated at [40 CFR 122.44(d)] require limits in addition to or more stringent than effluent limitation guidelines (technology based).

Segment specific standards for 20.6.4.211 require pH to be between 6.6 – 9.0 su's, which are more stringent than the WQMP limits of 6.0 to 9.0 su's. The permit proposes pH limitations of 6.6 – 9.0 su's. These limits are more stringent than the current permit. These limits will be changed for Outfall 001 and proposed for Outfall 002.

This permit does not authorize any discharge of sanitary waste, and limitations for bacteria are not required.

The previous permit had report requirements for temperature. The stream segment specific temperature limitation is 90° F. Based on the most recent DMR data, the discharge has been consistently between 59º and 69° F. The facility does not have any activities that cause heat to be added to the flow, no cooling of industrial motors, pumps or chillers, and based on the BPJ of the permit writer, temperature does not exhibit a potential to exceed WQS. Therefore, temperature report requirements are proposed to be eliminated from the draft permit for Outfall 001. The discharge from Outfall 002 is from impoundments containing standing water exposed to the sun. Weekly temperature reporting, when discharging, shall be proposed for Outfall 002.

4. Toxics Evaluation

The Clean Water Act in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at [40 CFR 122.44 (d)] state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant. The application and additional data had arsenic, barium, selenium and boron above MQL's. The pollutant concentrations contained in the permit application were measured against State numeric water quality standards, and these are shown on the attached spreadsheet. Based on the screening of the pollutants with applicable State WQS, none of the pollutants demonstrate a reasonable potential to exceed WQS.

Additionally, the previous permit had ammonia as a "Report" requirement for Outfall 001. Analysis of that pollutant shows less than 0.335 mg/l at end-of-pipe, and is not at sufficient concentrations to be a concern. Ammonia report requirements are proposed to be eliminated in the draft permit from Outfall 001.

Based on the BPJ of the permit writer, the draft permit will propose ammonia "Report" requirements for Outfall 002. This type of aquatic production method is new to NPDES permits in the State, and will be used to assess potential impacts on the receiving water.

5. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants 49 FR 9016-9019, March 9, 1984." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State/Tribal water quality standard resulting in nonconformance with the provisions of [40 CFR 122.44(d)]; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

The Region is currently implementing its post third round policy in conformance with the Regional strategy. Either technology-based effluent limitations reflecting the best controls available or additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls. Biomonitoring of the effluent is thereby required as a condition of this permit to assess potential toxicity.

6. Aquatic Toxicity Testing

a. General Comments

The State has established narrative criteria, which in part, state that:

"Surface waters of the State shall be free of toxic pollutants from in other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms;..." (NM Standards Section 20.6.4.13.F.1)

The Implementation Guidance for NM Standards state that:

"Biomonitoring requirements will be applied to all major dischargers and those minor dischargers with known or potential problems to cause or contribute to exceedances of applicable NM Standards, numeric or narrative water quality criteria in waters with existing or designated fishery uses" (Section VI. Narrative Toxics Implementation).

b. Permit Action – Outfall 001

In September 2002, the facility failed a biomonitoring test from Outfall 001, and also failed a subsequent retest. This action was documented in a letter from DGF to EPA December 2, 2003. In June 2003, the facility failed its biomonitoring tests from Outfall 001. Retests taken

December 2003, and again in March and June 2004, also failed for either one or both of the test species. The facility submitted a TRE Action Plan received February 19, 2003. The Action Plan set out certain activities that the facility would undertake; studies of influent, effluent, operations and a toxicity identification evaluation. The Action Plan stated that when the source was identified, the final TRE report would be submitted to EPA. Since that TRE Action Plan, the DGF has not submitted any analyses or opinions relative to the TRE. Additionally, DGF did not responded to a letter from EPA, dated August 16, 2004, requesting the required quarterly TRE activity reports as directed in the permit. In light of the facility's inaction regarding the failures, and failure to submit the TRE plan, or required quarterly reports or final report, EPA is placing whole effluent toxicity limits in the permit for Outfall 001. Since the required TRE submittal date was February 2005, the draft permit will not propose a compliance schedule to meet the WET limits.

The WET limit is determined based on the instream concentration of effluent after complete mixing with 100% of the receiving water of the Pecos at low-flow conditions, measured at United States Geological Survey (USGS) Station No. 08383000. The critical low flow is measured at 3.083 cfs (1.99 MGD). Using procedures contained in the IG, the critical dilution for perennial streams is calculated as:

$C_d = (Q_e \div (FQ_a + Q_e)$

Where:
Q_e = the treatment facility flow determined above, 6.8 MGD
Q_a = the critical low-flow determined above, 1.99 MGD
F = the fraction of stream allowed for mixing, and for site specific streams, when conditions such as climatic conditions, channel characteristics and morphology are not known, a value of 1.0 is used.

$C_d = (6.8 \div \{(1.0*1.99) + 6.8\}$
$C_d = 77\%$

In a letter from Marcy Leavitt, NMED, to Claudia Hosch, EPA, December 16, 2005, NMED provided Narrative Toxics Implementation Guidance – Whole Effluent Toxicity, (NTIG-WET), an update to the 1995 Implementation Guidance. The facility is designated as a minor industrial, discharging into a perennial stream. The NTIG-WET plan requires a chronic 7-day WET limit, 77% critical dilution, using the species Ceriodaphnia dubia and Pimephales promelas, at a once per year frequency.

Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS 30-DAY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity (PCS 22414) (7-Day NOEC)	77%	77%
Ceriodaphnia dubia	REPORT	REPORT
Pimephales promelas	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS FREQUENCY	TYPE
Whole Effluent Toxicity (7-Day NOEC)		
Ceriodaphnia dubia	1/Year	Grab
Pimephales promelas	1/Year	Grab

The sample for the WET test shall be taken during the period April 1 and June 30. The permittee shall submit the results of any toxicity testing performed in accordance with the Part II of the Permit.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the appropriate test method publication. The full reports required by each test section need not be submitted unless requested. However, the full report is to be retained following the provisions of [40 CFR Part 122.41 (j) (2)]. The permit requires the submission of the toxicity testing information to be included on the DMR.

A minimum of five effluent dilutions in addition to an appropriate control (0%) are to be used in the toxicity tests. These additional effluent concentrations are 24%, 32%, 43%, 58%, and 77%. The low-flow effluent concentration (critical dilution) is defined as 77% effluent determined above.

c. Permit Action – Outfall 002

Previously it was stated that for purposes of establishing permit limits, the critical dilution from Outfall 001 would apply for Outfall 002. For this new outfall, the draft permit proposes biomonitoring for Outfall 002. The same critical dilution, effluent concentrations and species that were established for Outfall 001 shall be proposed for Outfall 002, except that Outfall 002 will be "Report" (biomonitoring) instead of a WET limit. In accordance with the NTIG-WET Plan, the test frequency shall be once per permit term.

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING 30-DAY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (7 Day Static Renewal)		
Ceriodaphnia dubia	REPORT	REPORT
Pimephales promelas	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS FREQUENCY	TYPE
Whole Effluent Toxicity Testing (7 Day Static Renewal)		
Ceriodaphnia dubia	1/Permit Term	Grab
Pimephales promelas	1/Permit Term	Grab

7. Permit Limits

See the proposed permit for final limitations

8. Monitoring Frequency

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR 122.48(b)] and to assure compliance with permit limitations [40 CFR 122.44(i)(1)]. The monitoring frequencies are based on best professional judgment (BPJ), taking into account the nature of the facility.

Outfall 001:

Flow shall be monitored daily by measurement of head over the weir and reported. The parameter pH shall be monitored twice/month, with each reporting period sample taken at least 10-days after the previous reporting period's first sample. This frequency is proposed at the same frequency in the current permit.

Outfall 002:

Flow shall be monitored daily, when discharging, by measurement of head over the weir and reported. The parameter pH shall be monitored once/week when discharging using grab samples. Temperature and ammonia shall be monitored once per week, when discharging, both by grab samples.

Combined Flow, Outfall COMB:

The permittee has requested that it have the option of discharging wastewater from either the warmwater or the coldwater production side through the other side's sedimentation structure/outfall. The proposed permit will authorize this under a reporting outfall designated by Outfall COMB. Outfall COMB shall be used when either coldwater flow is discharged through Outfall 002, or warmwater flow is discharged through Outfall 001. This authorization shall only be used when the sedimentation ponds are being cleaned, or short term repair work not lasting more than two-months requires the combination discharge. The use of this outfall shall be intermittent, and only for cause, not convenience. The monitoring requirements for this outfall shall be identical to Outfall 002, with daily monitoring of flow, when discharging. Once per week monitoring and concentration limits for TSS, SS, ammonia, temperature and pH, when discharging. There will be no mass loading limits, for the same reason as was discussed for Outfall 002 above. There will be no biomonitoring testing required for this outfall. Biomonitoring/WET testing has been established in the primary Outfalls 001 and 002.

F. APPROVED MEDICATIONS AND HATCHERY PRACTICES

1. Drugs Medications and/or Chemicals, Not Chlorine

At times, DGF hatchery staff administers drugs medications and/or chemicals (DMC) used for aquaculture purposes in the water system, in a manner and/or amount that will allow it to be discharged to waters of the United States. The US Food and Drug Administration (FDA) approve some of these DMC and/or amounts of use. Some times, however, either the DMC are used for purposes not specifically approved by the FDA, or the DMC are not approved at all by the FDA, but their use is consistent with sound hatchery practices. With the exception of chlorine, anytime DMC, at either concentrations and/or uses not approved by the FDA, are used either in amounts or a manner that it would allow it to enter the receiving stream, the DGF shall notify both EPA and NMED of its impending use. Notification to NMED shall be by phone within one business day of its decision to use the DMC, and to EPA within three days. Written notification shall also be to both EPA and NMED, in writing no less than five-business days later. Both notifications shall provide the name of the DMC, its amount, concentration of use and reason for its use, along with the expected date and time of its use, and expected duration of use.

When the DMC used is either not approved by the FDA or its use is not consistent with FDA practices, such that it would allow it to enter the receiving stream, DGF shall conduct the following Whole Effluent Toxicity Test, per instance of use (See footnote *1 below). This testing shall be reported on discharge monitoring report (DMR) and reported as Outfall 01B. On the DMR, report in the comment section the date, time, duration and the name of the DMC used. Also note the date of the letter DGF sent to EPA and NMED. Additionally, this test will be "Report" (biomonitoring) and not a WET limit.

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	
	30-DAY AVG MINIMUM	48-Hr. MINIMUM
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*1)		
Daphnia pulex	REPORT	REPORT
Pimephales promelas	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
	FREQUENCY	TYPE
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*1)		
Daphnia pulex	1/Use (*2, 3)	24-Hr. Composite
Pimephales promelas	1/Use (*2, 3)	24-Hr. Composite

*1 Acute freshwater Whole Effluent Toxicity Testing

*2 WET testing shall be conducted on the maximum dose of each instance of intermittent use of drugs, medications and/or chemicals not approved by the FDA, or drugs, medications and/or chemicals for purposes other than those for which FDA approval was granted (not including chlorine). For long-term use of these drugs, medications and/or chemicals, only one WET test shall be required on the maximum dose of the treatment, unless that maximum dose is later increased by 20 percent. At that point, and any later increases above 20 percent, then additional WET tests will be required.

*3 The sample shall occur at the outfall location consistent with the unit being treated, during the time that the expected highest dose is being administered and shall be taken at a time taking into consideration the lag-time

for the slug of maximum dosage of DMC to flow from the point of application to the sample point. The grab sample for the WET test shall be taken 30-minutes after the expected arrival time of the first slug of DMC at the outfall. The expected arrival time can be determined by direct observation by use of a floatable marker such as wooden blocks.

2. Chlorine Use

During times when chlorine is used in the treatment process, for cleaning of the aquatic production system, and/or to eliminate parasites, DGF shall notify the Agency and the NMED. Notification to NMED shall be by phone within one business day of its decision to use the DMC, and at least three-business days prior to the actual use, and both EPA and NMED, in writing, within five-business days of its decision of use. The notification should give the expected date and time of its use and the expected duration of usage. This test shall be reported on the DMR as Outfall 01B. TRC shall be limited in the permit to a maximum 11 ug/l end-of-pipe. TRC limits are 11 ug/l chronic and 19 ug/l acute. Acute standards are end-of-pipe; chronic standards are allowed to use dilution. Since the critical dilution is defined as 77%, the resulting instream dilution using the chronic 11 ug/l standard is 14.3 ug/l, less than the end-of-pipe 19 ug/l, therefore, the use of the 11 ug/l chronic TRC standard is more stringent than the chronic limit, and will be used for the TRC limit. This test will be in place of the WET test described above for other DMC. Testing for TRC shall be an instantaneous grab sample, with analysis taken within 15-minutes of sample collection. During ALL times when chlorine is being used, DGF shall monitor and report TRC daily, the discharge water for total residual chlorine (TRC). In addition, TRC shall be measured and reported for one day after the last use of the chlorine. On the DMR report in the comment section the date, time and duration of the chlorine use shall be noted. Also note the date of the letter that was sent to EPA and NMED. The first day of use, TRC shall be sampled approximately 30-minutes after the expected slug of water has passed through the outfall. The expected time of arrival can be determined by direct observation by the use of a floatable marker such as wooden blocks.

XII. 303(d) LIST

The Pecos River, Segment No. 20.6.4.211, is listed on the current "2004-2006 State of New Mexico 303(d) List for Assessed Stream and River Reaches." The stream is listed as fully supporting fish culture, irrigation, livestock watering, wildlife and secondary contact. However, the stream segment does not support limited warmwater fishery with a probable cause of sedimentation/siltation and cause from flow alterations from water diversions and/or grazing. The total maximum daily load (TMDL) is scheduled to be done in 2010. The permit has a reopener clause that would allow the permit to be changed if at a later date the TMDL is completed.

XIII. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State WQS and are protective of those designated uses. Furthermore, the

policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, per NMAC 20.6.4.8.A.2.

XIV. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://ifw2es.fws.gov/EndangeredSpecies/lists/, four species in Guadalupe County are listed as endangered or threatened. The Southwestern willow flycatcher (*Empidonax traillii extimus*) and the Black-footed ferret (*Mustela nigripes*) are listed as endangered, and the Bald eagle (*Haliaeetus leucocephalus*) and the Pecos sunflower (*Helianthus paradoxus*), are listed as threatened.

In January 31, 2001, EPA provided the Service with the Biological Evaluation for the proposed reissuance for the Rock Lake facility, and requested formal consultation with the USFWS. On March 7, 2001, USFWS provided, in Consultation Number #2-22-01-I-194, concurrence with EPA's "*no effect*" determination concerning the reissuance of the permit. Since that biological determination was made, there has been no change to the biological community in the county. The draft permit does propose an expansion to the site, and therefore an increase to the discharge in volume. The limits for the new addition will be identical as the existing discharge, including new promulgated technology-based best management practices in addition to the existing numerical technology based limits, biomonitoring during periods when drugs, medicines and chemicals that are beyond the scope of FDA approval are used and lastly the routine biomonitoring requirements. Additional mass loadings will be made to the receiving water, but these will also be along with a net increase of water to the current stream system, as the water source is spring feed, and not river water. EPA has determined that the reissuance of this permit will have "*no effect*" on listed threatened and endangered species.

XV. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XVI. CERTIFICATION

The permit is in the process of certification by the State agency following regulations promulgated at [40 CFR 124.53]. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVII. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVIII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(S)

EPA Application Forms 1 and 2B received by EPA March 13, 2006.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through July 17, 2005.

Implementation Guidance for the State of New Mexico Standards for Interstate and Intrastate Streams, May 5, 1995.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2004 -2006.

D. MISCELLANEOUS REFERENCES

EPA Region 6 "Policy for Post Third Round NPDES Permitting" and "Post Third Round NPDES Permit Implementation Strategy," October 1, 1992.

National Toxics Rule 57 FR 60848, December 22, 1992.

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989.

Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027, September 1991.

E. CORRESPONDENCE

Letter from Marcy Leavitt, NMED to Willie Lane, EPA, May 25, 2006, providing State General Certification.